

:()

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β
(GSIS)

:

()

II

-

(nSTZ)

:

:

:

:

Diabetes Mellitus and the Control of Cellular Energy Metabolism

:

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*

Farzamib@sina.tums.ac.ir :

:/

// :

// :

[] (GSIS)

(EC. 2. 7.1.2)

[] GSIS

II []
[] (II) MODY-2

[]

[]

μM)

III II I

(Km =

(D IV)

(mM) Km (≈ KDa)

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(GKRP)

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[]

[]

II

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[]

(nSTZ) II

[]

³ β-cell dysfunction

¹ Translocation

² Fuel Hypothesis

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/ /

/

+

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ELISA

DRG

mg/kg

()

[]

[]

()

-

Leuconostoc mesenteroides

NAD⁺ NADH

Kontes

g

glass

/

()

/

BSA

-

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)

(

/

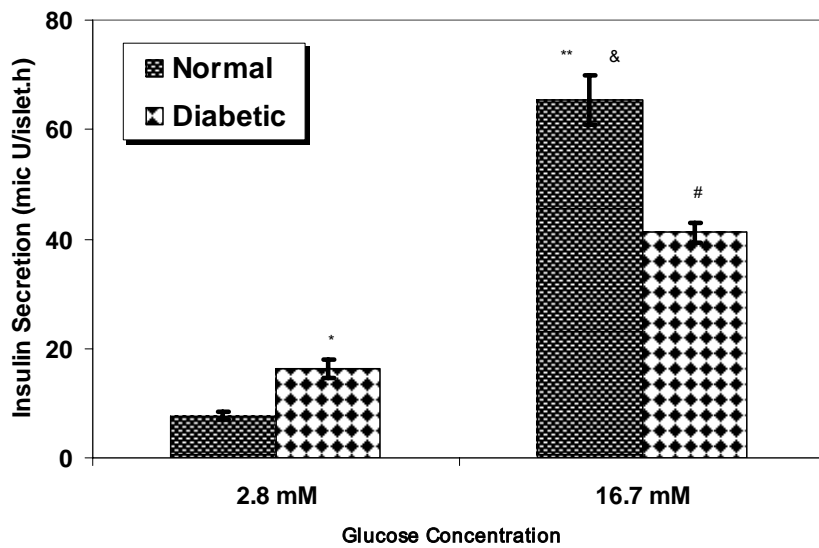
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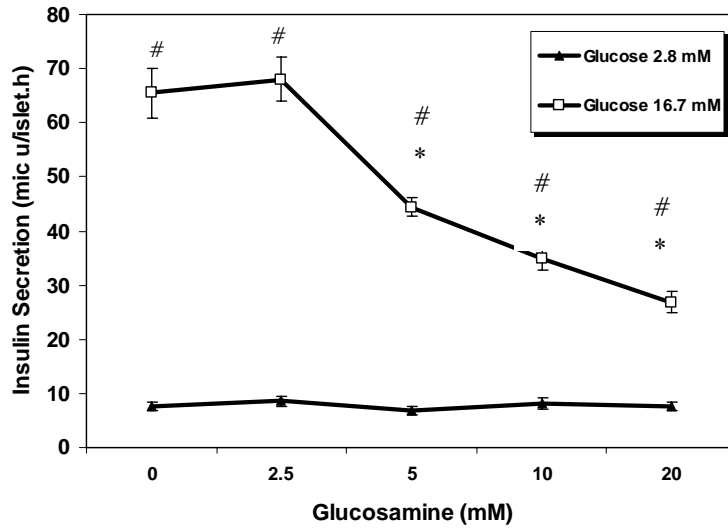
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¹ Rat

\pm
 n . (Mean \pm SE)
 SPSS
 / P-Value / ATP
 STZ
 ()
 / ([])
 STZ

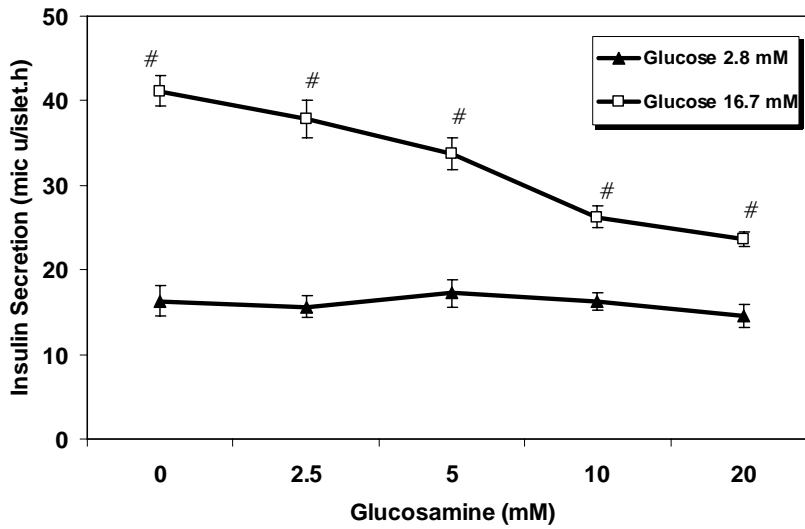


P< / ** .
 P< / * . n = n = . (Mean \pm SE)
 / P< / # . /



(GSIS)

* / + / P < / # . n = . n = . (Mean ± SE)
(P < /)



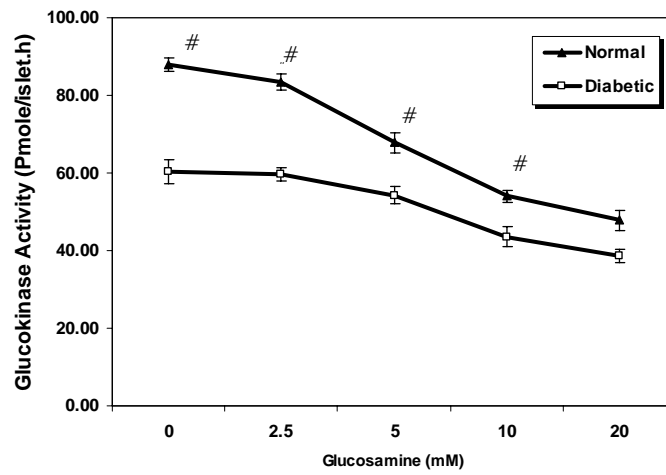
(GSIS)

* / + / P < / # . n = . n = . (Mean ± SE)

/ /

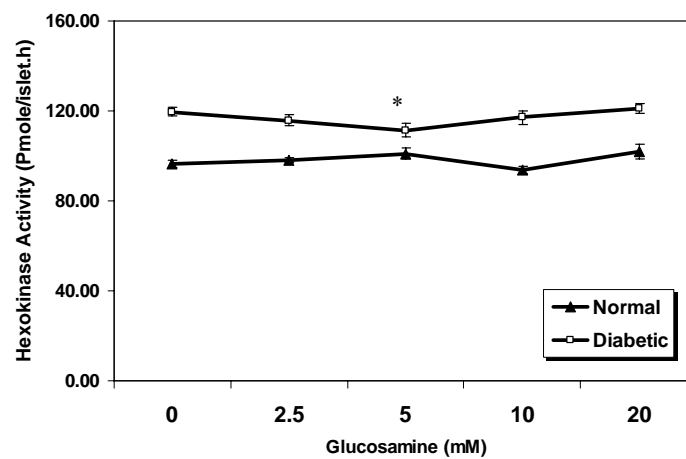
:

(/)
 / (P< /)
 (GSIS)
 /) (P< /)
 (P<
 r = /)
 (r = / (P< /)



نمودار ۴- اثر غلظت‌های مختلف گلوکز آمین بر فعالیت گلوکوکیناز پانکراس در موش‌های صحرایی سالم و دیابتی

(P< /) # n = n = (Mean ± SE)



نمودار ۵- اثر غلظت‌های مختلف گلوکز آمین بر فعالیت هگزوکیناز پانکراس در موش‌های صحرایی سالم و دیابتی

(Mean ± SE) * n = n = (P> /)

()

/

(P< /)

r = /)

(r = /

(P< /)

[]

[] []

[]

()

(P< /)

[]

(GSIS)

/

[]

()

GSIS

[]

II

GSIS

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[

II

()

/

(II) nSTZ

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()

[] []

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/

(GSIS)

[/]

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) (

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[] .(

II

GSIS

[] []

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[] []

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¹ Dose-dependent

()

)

(NIDDM=II

GSIS

.[]

Overexpression

GKRP

.[]

Km

.[]

()

.[]

[]

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